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10/066,253	01/31/2002	William W. Bannister	08688-040002	3573

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225 FRANKLIN ST
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EXAMINER

SINES, BRIAN J

ART UNIT	PAPER NUMBER
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1743

DATE MAILED: 09/03/2003

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/066,253

Applicant(s)

BANNISTER ET AL.

Examiner

Brian J. Sines

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 6/9/2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 15-29 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 15-29 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ 6) ☐ Other: _____

DETAILED ACTION

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

With respect to each of the following rejections regarding claims 15, 20 – 23 and 26 – 29, the applicant's disclosure indicates that commercially available collection systems and thermal analyzers, such as micro-differential scanning calorimeter (microDSC) model 2990 available from TA Instruments, Inc. (New Castle, DE), are utilized to perform the identification process recited in the claims (see pp. 14 – 16). However, it should be noted that these claims are directed to a system or apparatus. Therefore, it is the structural limitations of the apparatus, as recited in the claims, which are considered in determining the patentability of the apparatus. These claims recite various process or use limitations and are accorded no patentable weight to an apparatus. For example, these claims recite how the apparatus is to be operated, such as the operating temperature, or what is intended to be detected using the apparatus, such as illegal drug or explosive compounds, which do not impart any limitations to define the structure of the apparatus being claimed. Process limitations do not add patentability to a structure, which is not distinguished from the prior art. A recitation of the intended use of the claimed invention must result in a structural difference between the claimed invention and the prior art in order to

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patentably distinguish the claimed invention from the prior art. If the prior art structure is capable of performing the intended use, then it meets the claim. See In re Casey, 152 USPQ 235 (CCPA 1967) and In re Otto, 136 USPQ 458, 459 (CCPA 1963). The Courts have held that it is well settled that the recitation of a new intended use, for an old product, such as the thermal detection apparatus in this case, does not make a claim to that old product patentable. See In re Schreiber, 128 F.3d 1473, 1477, 44 USPQ2d 1429, 1431 (Fed. Cir. 1997).

1. Claims 15, 16, 20 – 23, 24 and 26 – 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Dell et al. (U.S. Pat. No. 3,643,491). Regarding claims 15, 16, 23, and 24, Dell et al. teach a differential scanning calorimetry apparatus comprising: a thermal measuring apparatus (43, 44 & 47); and an analyzer (54) coupled to the thermal measuring apparatus (see col. 2, lines 50 – 73; figures 7 & 8). Regarding claims 28 and 29, Dell et al. teach that data or thermograms of sample and reference materials are recorded and compared (see col. 2, lines 51 – 74).

2. Claims 15, 20 – 23 and 26 – 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Kimura et al. (U.S. Pat. No. 6,331,074 B1). Kimura et al. teach an apparatus comprising: a thermal measuring apparatus (thin-film heater 2 & thermocouple 15A); and an analyzer (a microcomputer) coupled to the thermal measuring apparatus (see col. 4, lines 46 – 67; col. 5, lines 1 – 62; col. 8, lines 35 – 67; figure 1).

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3. Claims 15, 20 – 23 and 26 – 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Sheffield (U.S. Pat. No. 5,356,217 A). Regarding claims 15 and 23, Sheffield teaches an apparatus (10) comprising: a thermal measuring apparatus (sample thermocouple assembly 28 & furnace 30); and an analyzer (microterminal 50) coupled to the thermal measuring apparatus (see col. 6, lines 1 – 68; col.7, lines 1 – 68; col. 8, lines 1 – 66; figures 1 – 3). Regarding claims 28 and 29, Sheffield teaches that reference or calibration data, which is inherently anticipated to be in the form of a thermogram, may be utilized (see col. 3, lines 50 – 68; col. 4, lines 1 – 68; col. 5, lines 1 – 19).

4. Claims 15, 20 – 23 and 26 – 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Vasilenko et al. (U.S. Pat. No. 4,317,360). Regarding claims 15 and 23, Vasilenko et al. teach an apparatus (10) comprising: a thermal measuring apparatus (photoelectric pyrometer 24 & block 1); and an analyzer (30) coupled to the thermal measuring apparatus (see col. 3, lines 60 – 68; col. 4, lines 1 – 68; col.5, lines 1 – 51; figures 1 – 3). Regarding claims 28 and 29, Vasilenko et al. teach that reference data, which is inherently anticipated to be in the form of a thermogram, for a standard sample, may be recorded and used for comparison (see col. 4, lines 48 – 61; col. 5, lines 19 – 51).

5. Claims 15, 20 – 23 and 26 – 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura (U.S. Pat. No. 6,210,035 B1). Nakamura teaches an apparatus comprising: a thermal measuring apparatus (heating furnace 1 and a thermocouple fixed to the bottom surface

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of the sample holder 4); and an analyzer (processor 18 & waveform analyzer 19) coupled to the thermal measuring apparatus (see col. 2, lines 30 – 67; col. 3, lines 1 – 64; figure 1).

6. Claims 15, 20 – 23 and 26 – 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Webster et al. (U.S. Pat. No. 5,300,888 A). Webster et al. teach an apparatus comprising: a thermal measuring apparatus (heater 107 & thermocouple 108); and an analyzer (CPU 120) coupled to the thermal measuring apparatus (see col. 4, lines 39 – 68; col. 5, lines 1 – 68; col. 6, lines 1 – 61; figures 2 – 4).

7. Claims 15, 20 – 23 and 26 – 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Lyon et al. (U.S. Pat. No. 5,981,290 A). Regarding claims 15 and 23, Lyon et al. teach an apparatus comprising: a thermal measuring apparatus (thermogravimetric analyzer 10); and an analyzer (computer 44) coupled to the thermal measuring apparatus (see col. 3, lines 11 – 47; col. 4, lines 1 – 47; figure 1). Regarding claim 20, Lyon et al. teach that the thermal measuring apparatus operates using anaerobic pyrolysis (see Abstract).

8. Claims 15, 20 – 23 and 26 – 29 are rejected under 35 U.S.C. 102(e) as being anticipated by Nakamura et al. (U.S. Pat. No. 5,826,983 A). Regarding claims 15 and 23, Nakamura et al. teach an apparatus comprising: a thermal measuring apparatus (heating furnace 21 & thermocouple 14); and an analyzer (45) coupled to the thermal measuring apparatus (see col. 3, lines 1 – 67; col. 4, lines 1 – 67; col. 5, lines 1 – 67; col. 6, lines 1 – 64; figures 1 – 6).

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Regarding claim 28, Nakamura et al. teach that the analyzer stores thermal analysis data for reference (see col. 6, lines 2 – 12).

9. Claims 15, 16, 20 – 24 and 26 – 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Fawcett et al. (U.S. Pat. No. 4,821,303). Regarding claims 15 and 23, Fawcett et al. teach an apparatus comprising: a thermal measuring apparatus (resistive heating element 100 & resistive temperature sensing element 102); and an analyzer (computer 108) coupled to the thermal measuring apparatus (see col. 7, lines 41 – 68; col. 8, lines 1 – 47; figure 2 – 4). Regarding claims 16 and 24, Fawcett et al. teach that the thermal analyzer is preferably a differential scanning calorimeter (see col. 2, lines 56 – 64). Regarding claim 20, Fawcett et al. teach that the apparatus may be operated using an anaerobic environment, such as with nitrogen (see Example 6: col. 15, lines 45 – 54). Regarding claims 21 and 22, Fawcett et al. teach that the apparatus can be operated from about 140°C to 150 °C (see figure 14A). Regarding claim 26, Fawcett et al. teach that the apparatus may be utilized in investigating pharmaceutical drugs (see col. 10, lines 51 – 63). Regarding claim 28, Fawcett et al. teach that the apparatus may record the resulting calorimetric data, which would be inherently anticipated to be in the form of a thermogram (see col. 3, lines 21 – 54). Regarding claim 29, Fawcett et al. teach the comparison and analysis of both sample and reference materials (see col. 7, lines 64 – 68; col. 8, lines 1 – 16).

10. Claims 15, 16, 20 – 24 and 26 – 29 are rejected under 35 U.S.C. 102(b) as being anticipated by Reading et al. (U.S. Pat. No. 5,346,306 A). Regarding claims 15 and 23, Reading

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et al. teach an apparatus comprising: a thermal measuring apparatus (e.g., sample temperature thermocouple 114 & electric furnace 119); and an analyzer (microcomputer 110) coupled to the thermal measuring apparatus (see col. 7, lines 15 – 55). Regarding claims 16 and 24, Reading et al. teach that the invention may be used with differential scanning calorimetry (see col. 7, lines 5 – 14). Regarding claim 20, Reading et al. teach that the apparatus may be operated using an anaerobic environment, such as with nitrogen (see col. 7, lines 49 – 55). Regarding claims 21 and 22, Reading et al. teach that the apparatus can be operated from about 50°C to 275°C (see figure 4b). Furthermore, regarding claims 23, 28 and 29, Reading et al. teach the comparing of the data to a database or library of known results in order to determine the identification and properties of the sample material (see col. 1, lines 11 – 49; col.10, lines 20 – 39; col. 8, lines 16 – 52).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

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4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

1. Claims 15 – 17 and 19 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drew et al. (U.S. Pat. No. 5,313,061 A) in view of Reading et al. (U.S. Pat. No. 5,346,306 A). Regarding claims 15, 16, 23, 24, 26 and 27, Drew et al. teach an analytical system for the detection and identification of explosive and illegal drug compounds. Drew et al. teach that their disclosed system utilizes mass spectrometry for the identification of these chemical compounds (see col. 1, lines 1 – 55). However, Drew et al. does not specifically teach the incorporation of a thermal analysis technique, such as differential scanning calorimetry (DSC), for the identification of chemical compounds. Reading et al. do teach thermal analysis techniques, and in particular differential scanning calorimetry, for determining sample composition and structure (see col. 1, lines 1 – 67). Therefore, the prior art, as evidenced by Reading et al., recognizes the suitability of thermal analysis techniques for the intended purpose of chemical compound identification (see MPEP section 2144.07). Both of these techniques, mass spectrometry and thermal analysis, are notoriously well known in the art for being utilized for the same purpose, for the identification of chemical compounds, as is evidenced by Drew et al. and Reading et al., respectively. Hence, these identification techniques are considered functional equivalents recognized in the prior art (see MPEP section 2144.06). The Courts have held that an express suggestion to substitute one equivalent component or process for another is not necessary to render such a substitution obvious. See In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). Therefore, it would have been obvious to one of ordinary skill in the art to substitute and incorporate the known equivalent analytical technique of thermal analysis, such as differential scanning calorimetry, as taught by Reading et al., with the analytical detection

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system, as taught by Drew et al., in order to facilitate effective sample identification. Regarding claim 15, Reading et al. teach a DSC apparatus comprising: a thermal measuring apparatus (sample temperature thermocouple 114 & electric furnace 119); and an analyzer (microcomputer 110) coupled to the thermal measuring apparatus (see col. 7, lines 15 – 55). Regarding claims 17 and 25, Drew et al. teach the incorporation of a collection apparatus (concentrator assembly 12) that collects and concentrates the sample prior to analysis (see col. 6, lines 22 – 39). Regarding claim 19, Drew et al. teach the incorporation of solvent extraction (see col. 6, lines 61 – 68 col. 7, lines 1 – 4). Regarding claim 20, Reading et al. teach that the DSC apparatus may be operated using an anaerobic environment, such as with nitrogen (see col. 7, lines 49 – 55). Regarding claims 21 and 22, Reading et al. teach the DSC apparatus can be operated from about 50°C to 275 °C (see figure 4b). Furthermore, regarding claims 23 and 26 – 29, Reading et al. teach the comparing of the data to a database or library of known results in order to determine the identification and properties of the sample material (see col. 1, lines 11 – 49; col. 8, lines 16 – 52; col. 10, lines 20 – 39).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drew et al. in view of Reading et al. as applied to claims 15 – 17 and 19 – 29 above, and further in view of Volsy (U.S. Pat. No. 3,827,217). Drew et al. teach that the detection system may be used for the analysis of hazardous and toxic chemical compounds in air samples (see col. 1, lines 10 – 34). Drew et al. teach the incorporation of a collection apparatus (concentrator assembly 12, which is a concentration cartridge loaded with an adsorbent) that collects and concentrates the air sample prior to sample analysis (see col. 6, lines 22 – 39). Neither Drew et al. or Reading et al.

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specifically teach the incorporation of a means of electrostatic precipitation for concentrating samples prior to analysis. Volsy does teach the use of an electrostatic precipitator for the collection of particles in a gas, such as air, prior to chemical analysis (see col. 1, lines 1 – 16). Therefore, the prior art, as evidenced by Volsy, recognizes the suitability of the electrostatic precipitation technique for the intended purpose of concentrating samples prior to analysis (see MPEP section 2144.07). Both of these collection and concentration techniques, the use of an adsorbent and electrostatic precipitation, are notoriously well known in the art for being utilized for the same purpose, for the collection and concentration of chemical compounds in air samples prior to analysis, as is evidenced by Drew et al. and Volsy, respectively. Hence, these concentration techniques are considered functional equivalents recognized in the prior art (see MPEP section 2144.06). The Courts have held that an express suggestion to substitute one equivalent component or process for another is not necessary to render such a substitution obvious. See In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). Therefore, it would have been obvious to one of ordinary skill in the art to substitute and incorporate the known equivalent collection and concentration technique of electrostatic precipitation, as taught by Volsy, with the analytical detection system, as taught by Drew et al. in view of Reading et al., in order to facilitate effective sample collection and concentration for efficient sample identification.

2. Claims 15 – 17 and 19 – 29 are rejected under 35 U.S.C. 103(a) as being unpatentable over Drew et al. (U.S. Pat. No. 5,313,061 A) in view of Fawcett et al. (U.S. Pat. No. 4,821,303). Regarding claims 15, 16, 23, 24, 26 and 27, Drew et al. teach an analytical system for the detection and identification of explosive and illegal drug compounds. Drew et al. teach that

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their disclosed system utilizes mass spectrometry for the identification of these chemical compounds (see col. 1, lines 1 – 55). However, Drew et al. does not specifically teach the incorporation of a thermal analysis technique, such as differential scanning calorimetry (DSC), for the identification of chemical compounds. Fawcett et al. do teach thermal analysis techniques, and in particular differential scanning calorimetry, for determining sample composition and structure (see col. 2, lines 56 – 64). Furthermore, Fawcett et al. teach that the apparatus may be utilized in investigating pharmaceutical drugs (see col. 10, lines 51 – 63). Therefore, the prior art, as evidenced by Fawcett et al., recognizes the suitability of thermal analysis techniques for the intended purpose of chemical compound identification (see MPEP section 2144.07). Both of these techniques, mass spectrometry and thermal analysis, are notoriously well known in the art for being utilized for the same purpose, for the identification of chemical compounds, as is evidenced by Drew et al. and Fawcett et al., respectively. Hence, these identification techniques are considered functional equivalents recognized in the prior art (see MPEP section 2144.06). The Courts have held that an express suggestion to substitute one equivalent component or process for another is not necessary to render such a substitution obvious. See In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). Therefore, it would have been obvious to one of ordinary skill in the art to substitute and incorporate the known equivalent analytical technique of thermal analysis, such as differential scanning calorimetry, as taught by Fawcett et al., with the analytical detection system, as taught by Drew et al., in order to facilitate effective sample identification. Regarding claims 15 and 23, Fawcett et al. teach an apparatus comprising: a thermal measuring apparatus (resistive heating element 100 & resistive temperature sensing element 102); and an analyzer (computer 108) coupled to the thermal

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measuring apparatus (see col. 7, lines 41 – 68; col. 8, lines 1 – 47; figures 2 – 4). Regarding claim 20, Fawcett et al. teach that the apparatus may be operated using an anaerobic environment, such as with nitrogen (see Example 6: col. 15, lines 45 – 54). Regarding claims 21 and 22, Fawcett et al. teach that the apparatus can be operated from about 140°C to 150 °C (see figure 14A). Regarding claim 28, Fawcett et al. teach that the apparatus may record the resulting calorimetric data (see col. 3, lines 21 – 54). Regarding claim 29, Fawcett et al. teach the comparison and analysis of both sample and reference materials (see col. 7, lines 64 – 68; col. 8, lines 1 – 16). Regarding claims 17 and 25, Drew et al. teach the incorporation of a collection apparatus (concentrator assembly 12) that collects and concentrates the sample prior to analysis (see col. 6, lines 22 – 39). Regarding claim 19, Drew et al. teach the incorporation of solvent extraction (see col. 6, lines 61 – 68; col. 7, lines 1 – 4).

Claim 18 is rejected under 35 U.S.C. 103(a) as being unpatentable over Drew et al. in view of Fawcett et al. as applied to claims 15 – 17 and 19 – 29 above, and further in view of Volsy (U.S. Pat. No. 3,827,217). Drew et al. teach that the detection system may be used for the analysis of hazardous and toxic chemical compounds in air samples (see col. 1, lines 10 – 34). Drew et al. teach the incorporation of a collection apparatus (concentrator assembly 12, which is a concentration cartridge loaded with an adsorbent) that collects and concentrates the air sample prior to sample analysis (see col. 6, lines 22 – 39). Neither Drew et al. or Fawcett et al. specifically teach the incorporation of a means of electrostatic precipitation for concentrating samples prior to analysis. Volsy does teach the use of an electrostatic precipitator for the collection of particles in a gas, such as air, prior to chemical analysis (see col. 1, lines 1 – 16).

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Therefore, the prior art, as evidenced by Volsy, recognizes the suitability of the electrostatic precipitation technique for the intended purpose of concentrating samples prior to analysis (see MPEP section 2144.07). Both of these collection and concentration techniques, the use of an adsorbent and electrostatic precipitation, are notoriously well known in the art for being utilized for the same purpose, for the collection and concentration of chemical compounds in air samples prior to analysis, as is evidenced by Drew et al. and Volsy, respectively. Hence, these concentration techniques are considered functional equivalents recognized in the prior art (see MPEP section 2144.06). The Courts have held that an express suggestion to substitute one equivalent component or process for another is not necessary to render such a substitution obvious. See In re Fout, 675 F.2d 297, 213 USPQ 532 (CCPA 1982). Therefore, it would have been obvious to one of ordinary skill in the art to substitute and incorporate the known equivalent collection and concentration technique of electrostatic precipitation, as taught by Volsy, with the analytical detection system, as taught by Drew et al. in view of Fawcett et al., in order to facilitate effective sample collection and concentration for efficient sample identification.

Response to Arguments

Applicant's arguments with respect to claims 15 – 29 have been considered but are moot in view of the new ground(s) of rejection.

The applicant's disclosure indicates that commercially available collection systems and thermal analyzers are utilized to perform the identification process recited in the claims (see pp. 14 – 16). However, it should be noted that these claims are directed to a system or apparatus. The MPEP clearly instructs that the claiming of a new use, new function or unknown property,

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such as for the thermal detection apparatus in this case, which is inherently present in the prior art, does not necessarily make the claim patentable (see MPEP section 2112). The Courts have held that apparatus claims must be structurally distinguishable from the prior art in terms of structure, not function. See In re Danley, 120 USPQ 528, 531 (CCPA 1959); Hewlett-Packard Co. V. Bausch and Lomb, Inc., 15 USPQ2d 1525, 1528 (Fed. Cir. 1990). The Courts have held that the manner of operating an apparatus does not differentiate an apparatus claim from the prior art, if the prior art apparatus teaches all of the structural limitations of the claim. See Ex Parte Masham, 2 USPQ2d 1647 (BPAI 1987) (see MPEP section 2114). The applicant is advised that the MPEP clearly instructs that for process claims, a prior art apparatus anticipates a claimed process, if the apparatus carries out the process during normal operation (see MPEP section 2112.02). It appears that the process for the identification of unknown compounds, such as illegal drug and explosive chemical compounds, using a thermal analysis technique, such as differential scanning calorimetry, as recited in the instant claims, may be performed using the apparatus taught by the prior art. If the structural limitations of the intended apparatus do differ from that of the cited prior art, then apparently a structural feature, which is deemed critical to the invention, is not recited in the claims (see MPEP 2164.08 (c)).


Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Brian J. Sines, Ph.D. whose telephone number is (703) 305-0401. The examiner can normally be reached on Monday - Friday (11:30 AM - 8 PM EST).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jill A. Warden can be reached on (703) 308-4037. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.


Jill Warden
Supervisory Patent Examiner
Technology Center 1700